

AMENDMENTS TO THE ABSTRACT:

Please delete the existing abstract and add the following abstract.

Methods are disclosed for collecting and separating whole blood into one or more components. A disposable blood separation fluid circuit is provided which is adapted to cooperate with a reusable separation controller. The fluid circuit includes a fluid flow path for communication with a blood source and at least one container in fluid communication with the fluid flow path. The fluid flow path is connected to a blood source and quantities of whole blood are collected in the container and one other location within the fluid circuit. The source is then disconnected from the disposable fluid circuit. The quantities of whole blood are centrifugally processed, with processing of at least a portion of one of the quantities beginning after the source is disconnected from the fluid circuit.